

**REMARKS**

Reconsideration and withdrawal of the rejections set forth in the final Office Action dated May 19, 2004 are respectfully requested. In that final Office Action, the Examiner rejected Claims 1, 2, 5-7, 9 and 10 as being anticipated by U.S. Patent No. 6,597,395 to Kim et al. Finally, Claim 3 was rejected as being obvious over the Kim et al. patent. Applicants respectfully request reconsideration.

Turning to the rejection of the claims based upon the Kim patent, applicants respectively submit that there are significant differences between the methodology of the Kim patent and the present claimed invention. While applicants agree that the Kim patent also provides a method for black level calibration, the methodology used in the Kim patent is significantly different than the claimed invention.

Claims 1 and 7 require the use of a **second counter** to determine the automatic gain control and amplification system. This is not fairly shown in the Kim patent. While the Kim patent discloses an automatic gain control block 200, there is no indication that the automatic gain control block 200 can be adjusted in any manner, let alone be adjusted based upon the use of a second counter as is required in Claims 1 and 7.

The first set voltage level as used in the claimed invention is used for modifying the black calibration level while the second (different) set voltage level is used for modifying the automatic gain control system. The Kim patent does not address the modification of the automatic gain control at all.

The Examiner argues that the Kim patent teaches the use of a second voltage level and a second counter. The Examiner argues that the pixels in Kim are compared to the second voltage level, which is the "divided voltage value" as shown in Figure 3. The reference to divided voltage value in Kim is further detailed in Figure 3 and Col. 4, lines 14-62. The discussion

therein relates to a digital to analog converter 250 that includes a decoder 251. The D/A converter 250 also includes a voltage divider 252 that is the operative circuit that performs the conversion of a digital word ( $2^n$ ) to an analog voltage.

The Examiner's arguments that a "divided voltage value" is a second voltage level is erroneous. The divided voltage value is simply the analog version of the digital signal input into the D/A converter 250. They are not two different voltage levels as required by the claims, **but rather digital and analog versions of the same voltage level.**

Additionally, the Examiner argues that counter 240 maintains two counts: the pixels compared against a first voltage level (for black level calibration) and the pixels compared against a second voltage level (for automatic gain purposes). This is also erroneous. As noted above, the n-bit control word is the digital version of the analog voltage output by the D/A converter 250. For the Examiner to argue that Kim teaches two voltage levels and two counters is inappropriate and contrary to a plain reading of the Kim patent.

Moreover, applicant has amended Claims 1 and 7 to include the limitations of Claims 5 and 9 to specifically indicate that the second count is used to modify automatic gain control. This amendment does not introduce new matter and a new search should not be necessary. The Examiner argues that the second count is used to control automatic gain control. However, at Col. 5, lines 5-15, the black level clamp circuit 260 only clamps the black level of the CDS/AGC circuit 200. Thus, the black level claim circuit 260, while providing feedback to the CDS/AGS circuit 200, does not vary the automatic gain control of the CDS/AGC circuit 200.

In view of the foregoing, the claims pending in the application comply with the requirements of 35 U.S.C. § 112 and patentably define over the applied art. A Notice of Allowance is, therefore, respectfully requested. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged

to call the undersigned at (206) 359-6488. Further, the Examiner is requested to enter the amendments so as to place the claims in better condition for appeal if necessary.

Respectfully submitted,

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